

Glossary

- Archipelago:** An expanse of water with many scattered islands; a group of islands.
- Agroforestry:** A collective name for land-use systems and technologies where woody perennials (trees, shrubs, palms, bamboos, etc.) are deliberately used on the same land management unit as agricultural crops and/or animals, either in some form of spatial arrangement or temporal sequence. In agroforestry systems there are both ecological and economic interactions between the different components.
- Alluvial soils:** Soils made of materials deposited by running water (e.g., clay, silt, sand, and gravel).
- Aquifer:** A water-bearing stratum of permeable rock, sand, or gravel.
- Atoll:** A coral island consisting of a reef surrounding a lagoon.
- Biological diversity:** Includes two related concepts, genetic diversity and ecological diversity. Genetic diversity is the amount of genetic variability among individuals in a single species, whether the species exist as a single interbreeding group or as a number of populations, strains, breeds, races, or subspecies. Ecological diversity (species richness) is the number of species in a community of organisms. Both kinds of diversity are fundamental to the functioning of ecological systems.
- Biome:** A major ecological community type (e.g., grassland); a major biotic unit consisting of plant and animal communities having similarities in form and environmental conditions.
- Biotic:** Of or relating to life; caused or produced by living things.
- Broadleaf forest:** A type of closed forest where broadleaf species (dicotyledons or monocotyledons) predominate. The broadleaf trees (especially the dicotyledons) are often referred to as "hardwoods."
- Canopy:** The more or less continuous cover of branches and foliage formed collectively by the crowns of adjacent trees and other woody vegetation. Layers (i.e., understory and overstory) of the canopy may be distinguished.
- Clearcutting:** The removal of the entire standing crop of trees. In practice, may refer to exploitation that leaves much unsalable material standing (e.g., a commercial clearcutting).
- Closed forest:** Includes land where trees shade so much of the ground that a continuous layer of grass cannot grow. The tree cover is often multi-storied. Trees may be evergreen, semideciduous, or deciduous. Closed forests grow where the climate is relatively moist. Also called moist forest.
- Cloud forests:** Forests where clouds impinge almost continuously on tropical mountain vegetation. Generally a dense growth of trees of various diameters draped with mosses, ferns, and leafy liverworts.
- Coir-fiber:** A stiff, coarse fiber from the outerhusk of coconut.
- Commonwealth:** In the context of American territorial relations, the status currently held by Puerto Rico and approved for the Northern Mariana Islands. Denotes a high degree of local autonomy under a constitution drafted and adopted by the local residents.
- Conifer:** Any of an order (*Coniferales*) of mostly evergreen trees and shrubs including forms (as pines) with true cones and others (as yews) with an arillate fruit. Most are needle-leaved trees. Often referred to as **softwoods**.
- Conifer forest:** A type of closed forest. It includes only areas where conifer species (gymnosperm) predominate. These trees are often referred to as "softwoods."
- Conservation:** The management of human use of the biosphere so that it benefits present generations while maintaining its potential to meet the needs of future generations.
- Converted land:** Includes any land that has changed from a natural to a manipulated state, such as cropland planted annually or every few years with food or fiber crops and rangeland covered permanently with grasses, legumes, and/or herbaceous species and harvested by grazing livestock.
- Coppice:** A forest of trees that has grown from shoots or root suckers rather than seed. Coppicing refers to cutting trees close to ground level so they will regrow from coppice shoots.
- Copra:** Dried coconut meat yielding coconut oil.
- Deciduous:** Of perennial plants that are normally leafless for some period during the year.
- Deforestation:** The conversion of forests to land uses that have a tree cover of less than 10 percent.
- Degradation:** Refers to the biological, physical, and

- chemical processes that result in the loss of the productive potential of natural resources—e.g., soil erosion and loss of valuable or potentially valuable genetic types.
- Dendrothermal:** Caused by or relating to heat generated by burning wood.
- Desertification:** A process of extreme degradation of the biological potential of the land that can lead ultimately to desert-like conditions.
- Dipterocarp forests:** Forests dominated by trees of the Dipterocarpaceae family. These are tall trees of tropical Asia, Indonesia, and the Philippines that have a twowinged fruit and are the source of valuable timber, aromatic oils, and resins.
- Disturbed forest:** Forest that has been cleared in large areas within the last 60 years, commonly for crops or pasture. Usually it is sufficiently degraded or harvested regularly so it does not return to its original state. Trees maybe managed or left to natural successions. The term includes *plantations*.
- Dry forest:** See *open forest*.
- Ecological diversity:** See *biological diversity*.
- Ecosystem:** A unit of plant and animal life, within its nonliving environment, the components of which are linked together by a variety of processes, including the flow of energy through the system and the cycling of nutrients within it.
- Endangered species:** Species threatened with extinction as listed in the Endangered Species Act of 1973 and subsequent amendments.
- Endemic:** Restricted or peculiar to a locality or region. Native.
- Eutrophic:** Rich in dissolved nutrients (as phosphates). Often shallow and seasonally deficient in oxygen.
- Environmental services:** Benefits provided by the environment or environmental processes, often with values difficult to quantify. Examples include the erosion control function of vegetation and the filtering function of mangrove forests.
- Exotic:** Introduced from another country; not native to the place where found.
- Free association:** Proposed status for the peoples of Palau, the Marshall Islands, and the Federated States of Micronesia—currently the Trust Territory of the Pacific Islands. Provides for full internal self-government and substantial authority in foreign affairs. The United States would have responsibility for defense and some specified economic assistance.
- Forest fallow:** Land that has been cleared of its trees for cultivation and subsequently abandoned so that it may again have some woody vegetation.
- This includes patches of land that are being used to grow crops and some patches where forest has not been cleared which are too small to account for separately. The category does not include land where erosion or leaching have so degraded the site that only shrubs or grasses grow after the land is abandoned.
- Forest resources:** Includes trees, the organisms associated with them, and the land, waters, and microclimates that are substantially affected by them.
- Forest structure:** Distribution and arrangement of trees in a forest.
- Fuelwood:** Wood used as fuel for purposes of cooking, heat, or power production. Wood for charcoal, kilns, and ovens is included.
- Genetic diversity:** See *biological diversity*.
- Geomorphology:** Science that deals with the land and submarine relief features of the Earth's surface; the features dealt within geomorphology.
- Germ plasm:** Germ cells and their precursors serving as the bearers of heredity and being fundamentally independent of other cells; the hereditary material of the germ cells, Genes.
- Hardwood:** A conventional term for the timber of broadleaved trees, and the trees themselves, belonging to the botanical group Angiospermae.
- Hectare:** One hectare equals 2.47 acres. One square kilometer equals 100 hectares. One square mile equals 259 hectares. Thus, the 1.2 billion hectares of closed tropical forest is equal to 3 billion acres or 4.6 milion square miles.
- Horticulture:** The science and art of growing fruits, vegetables, flowers, or ornamental plants.
- Hydrology:** The study of the circulation of water in and between the atmosphere and the Earth's crust, with particular emphasis on the phases initiated by precipitation and ending with evapotranspiration. Water cycle.
- Hyphae:** The threads that make up the mycelium of a fungus.
- Indigenous:** Native to a specified area or region, not introduced. Endemic.
- Industrial plantations:** Sites where trees are planted to produce sawlogs, veneer logs, pulpwood, and pitprops. The category excludes plantations that produce fuelwood for industrial use.
- Industrial wood:** Wood used for sawlogs, veneer logs, pit props, pulpwood, chips, particles, or other construction purposes. Does not include fuelwood.
- In situ:** Protecting stock in the original habitat rather than in cold storage or in places such as gene banks and botanical or zoological gardens.

Insular: Of, relating to, or constituting an island; dwelling or situated on an island.

Laterite: A red residual product of rock decay that has a high content of oxides of iron and hydroxide of aluminum.

Landsat: Originally called Earth Resources Technological Satellite (ERTS). A group of satellites using electromagnetic sensors to record reflected radiation from the Earth to provide imagery to depict ground cover, etc. Remote-sensing tool important for resource inventories.

Leeward: Being in or facing the direction toward which the wind is blowing; the side opposite the windward.

Legally protected forest: Forests where logging is prohibited by law. It includes a variety of types of parks and protected areas. Illegal logging and agricultural clearing does occur in some of these areas.

Legumes: Any of a large family (Leguminosae) of dicotyledonous herbs, shrubs, and trees bearing nodules on the roots that contain nitrogen-fixing bacteria, and including important food, forage, and timber plants (as peas, beans, carob, or rosewood.)

Littoral: Of, relating to, or situated or growing on or near a shore, especially of the sea.

Logged-over forest: Productive forest area that has been logged or cleared at least once in the last 60 years but does not fit the criteria for managed forest. This category is not applied to open forests.

Managed forest: Productive forest where harvesting regulations are enforced, silvicultural treatments are carried out, and trees are protected from fires and diseases.

Mangroves: Any of a genus (*Rhizophora*, especially *R. mangle*) of tropical maritime trees or shrubs that throw out many prop roots and form dense masses important in coastal areas.

Manmade forest: See **plantations**.

Marginal land: Land that is relatively infertile or unproductive for agriculture without extraordinary capital inputs (as irrigation, fertilizer).

Merchantable: Of commercially acceptable quality. Salable.

Moist forest: See closed **forest**.

Monoculture: One species planted over a large area.

Montane: Of, relating to, growing in, or being the biogeographic zone that is made up of relatively moist cool upland slopes below timberline and

that is characterized by large evergreen trees as a dominant life form.

Mycorrhiza: The symbiotic association of the mycelium of a fungus with the roots of a seed plant.

New world: North, South, and Central America.

Open forests: Trees cover at least 10 percent of the ground but still allow enough light to reach the forest floor so that a continuous cover of grass can grow. Generally occur where the climate is relatively dry.

Open woodlands: See **open forests**.

Palmito: Any of several usually low-growing fan-leaved palms. Strips of the leaf blade of a palmetto used in weaving.

Phenology: A branch of science dealing with the relations between climate and periodic biological phenomena (as bird migration or plant flowering).

Phenotype: Any organism as observed—i.e., as judged by its visually perceptible characters resulting from the interaction of its genetic characteristics with the environment.

Pioneer species: A plant capable of invading bare or newly exposed sites and persisting there—i.e., colonizing them—until supplanted by succession species.

Plantation: A forest crop or stand established artificially either by sowing or planting. The term includes reforestation (reestablishment of a tree cover on deforested or degraded forest lands) and replacement of natural forest by a different tree crop. It does not include artificial regeneration (the application of postharvesting techniques to accelerate the regrowth of the species that had been logged).

Possession: Used to refer to any unincorporated territory of the United States—i.e., any territory to which the Constitution has not been expressly and fully extended. Includes American Samoa, Guam, and the Virgin Islands.

Productive forest: The characteristics of the trees, terrain, and forest regulations potentially allow the production of wood for industrial purposes (e.g., sawlogs, veneer logs, pulpwood, and industrial poles). Relates to both closed and open forests. The distance to consumption or export centers is not taken into account, so the category includes some forests that are not now economically accessible.

Propagule: A structure (as a cutting, a seed, or a spore) that propagates a plant.

Provenance trials (or tests): Testing populations

- of the same species to study their performance under a range of site and climatic conditions. In a provenance test, seeds are collected from a number of widely scattered stands and the seedlings are grown under similar conditions.
- Race:** Subdivision of a species distinguished by heritable physiological or morphological characteristics resulting from adaptation to a specific environmental condition. Tree species races are often described by referring to the geographic location where the race is found naturally.
- Rhizomes:** Underground, root-like stem of plant.
- Roundwood:** Wood in the natural state as felled, or otherwise harvested, with or without bark, round, split, or squared. It comprises all wood obtained from removals. Commodities included are sawlogs, veneer logs, pit props, pulpwood, other industrial roundwood, and fuelwood.
- Secondary forests:** Forest growth that has come up naturally after some major interference (e.g., logging, serious fire, or insect attack).
- Selectively cut:** The removal of only the most valuable trees.
- Shrubland:** Land that has woody vegetation covering at least 10 percent of the ground, but the main woody plants are bushy species with a height at maturity of 0.5 to 7 meters. Shrubland maybe the natural vegetation under dry or otherwise stressful conditions, or it may result from severe degradation of open or closed forest.
- Shifting cultivation (also called slash-and-burn agriculture):** Any farming system where land is periodically cleared, cropped, and returned to fallow.
- Siltation:** To choke, fill over, or obstruct with silt or mud.
- Silviculture:** The science and art of cultivating forest crops, based on a knowledge of forest tree characteristics.
- Social and environmental plantations:** Plantations designed for soil and water protection or to produce fuelwood and charcoal, polewood, or construction wood for local use, or some nonwood products such as gum arabics. The category excludes plantations for major nonwood commodities such as rubber, palm oil, coconuts, cloves, coffee, and cocoa. It also excludes trees planted to shade agricultural crops.
- Softwood:** A conventional term for both the timber and the trees belonging to the botanical group *Gymnospermae*. Commercial timbers of this group are generally confined to conifers.
- Sustain (sustaining, sustainable):** To maintain or increase the productivity and renewability of the resources in perpetuity.
- Symbiosis:** The intimate living together of two dissimilar organisms in a mutually beneficial relationship.
- Taungya:** Burmese word for hill cultivation. The principal objective is to plant crops of trees used for wood production. People are allowed to grow food crops among the newly planted trees for one or a few years.
- Tissue culture:** Microbiological technique for asexual reproduction of plants in vitro from a selected parent.
- Tree:** A woody perennial plant having a single, usually elongate, main stem generally with few or no branches on its lower part.
- Trust territory:** Areas placed under the international trusteeship system of the United Nations, territories detached from enemy states as a result of World War II, and territories voluntarily placed under the system. Are administered pursuant to the terms of individual agreements.
- Tropics:** The region lying between the Tropic of Cancer and the Tropic of Capricorn, 23.5° North and **23.50** South of the Equator. In this report, tropical forest includes all forest of the **76** listed nations, whether or not they are actually in the Tropics.
- Undisturbed forest:** Productive forest that has not been logged or cleared in the last **60** years, including both primary forest and old secondary forest. Natural tropical forest with at most a few small areas cleared by natural or human-induced events, regenerating by natural stages of succession. The term is not applied to open forests because nearly all open forests have been subject to cutting, burning, and grazing.
- Unproductive forest (for physical reasons):** Forest unsuitable for industrial wood production because of rough or inundated terrain or poor growth characteristics of the trees (stunted or crooked).
- Unproductive land:** Land that has been so degraded that it produces few useful products and provides minimal environmental services. It usually supports very little growth of useful species and does not return naturally to other categories of land.
- Watershed:** A region or area draining ultimately to a particular watercourse or body of water.
- Weeding:** Eliminating or suppressing undesirable vegetation so as to reduce competition with desirable vegetation.